



United States Department of the Interior



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March 6, 2018

CERTIFIED MAIL - RETURN RECEIPT REQUESTED
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PROTEST DECISION

DISMISSED

I. INTRODUCTION

On December 14, 2017, a Lease Sale Notice for the Montana State Office (MSO), March 13, 2018, Competitive Oil and Gas Lease Sale was posted, which initiated a 30-day protest period. At the same time, the Butte Field Office (BFO), Billings Field Office (BiFO), and North Central Montana District (NCMD) Oil and Gas Leasing Environmental Assessments (EAs), updated after a 30-day public comment period, were made available to the public.

In a fax to the Bureau of Land Management (BLM) dated January 12, 2018 (Enclosure 1), Earthjustice, on behalf of local landowners David Katz and Jack and Bonnie Martinell (Protesters), submitted a timely protest to the inclusion of 109 parcels located in the BFO, BiFO, and NCMD planning areas, Montana.

II. BACKGROUND

Public scoping for this lease sale was conducted from August 15-29, 2017. This scoping period was announced in a press release issued by the Montana State Office. The BFO, BiFO and

NCMD also posted National Environmental Policy Act (NEPA) notification log, reference numbers DOI-BLM-MT-L002-2017-0003-EA, DOI-BLM-MT-L002-2017-0002-EA, and DOI-BLM-MT-L0002-2017-0004-EA, respectively. In addition, the MSO mailed surface owner notification letters explaining the oil and gas leasing and planning processes. The letters requested written comments regarding any issues or concerns that should be addressed in the EAs being prepared for the parcels. The Protesters did not submit scoping comments at that time.

On September 30, 2017, the BLM Montana/Dakotas released the BFO, BiFO and NCMD Oil and Gas Leasing EAs for a 30-day public comment period. The EAs analyzed the potential effects from offering 109 nominated lease parcels in Montana containing 63,495 acres of Federal Mineral Estate in the March 13, 2018, Competitive Oil and Gas Lease Sale. Relevant public comments received during this process were addressed in the EAs, as appropriate. At that time, the Protesters submitted comments on the EAs regarding water resources. The EAs were updated and posted, along with the competitive sale list, on December 14, 2017, on the BLM's ePlanning website for a 30-day protest period.

After a careful review, BLM has decided to defer 23 BiFO parcels and three (3) BFO parcels due to potential environmental impacts presented in the EAs and public comments. See Enclosure 3 for a description of the deferred parcels. Any arguments within this Protest on deferred parcels are considered moot. The Butte and Billings Field Managers, and the NCMD District Manager recommended that 83 parcels be included in the March 13, 2018 lease sale. As a result of the Decision Record, a total of 83 nominated lease parcels (46,175 acres of Federal minerals) would be offered for lease at the MSO, March 13, 2018, Competitive Oil and Gas Sale with lease stipulations and/or lease notices as necessary for the proper protection and conservation of the resources associated with the lease issuances.

III. PROTEST ANALYSIS

Protest Summary: The Protesters submitted a timely protest (via fax) dated January 12, 2018, to the inclusion of 109 parcels identified in the MSO, March 13, 2018, Notice of Competitive Oil and Gas Lease Sale.

Protest Contentions and BLM Response:

A. BLM has Failed to Consider the Significant Impact of the Lease Sale on Groundwater.

The Environmental Assessments wrongly determined that offering parcels for leasing would not impact water resources. Because there is evidence that current industry practices do not adequately protect usable groundwater from contamination, and that issuance of these leases will likely have a significant effect on usable groundwater, the Findings of No Significant Impact were invalid and an EIS should have been prepared.

BLM must “consider every significant aspect of the environmental impact of a proposed action.” *Baltimore Gas & Elec. Co. v. NRDC*, 462 U.S. 87, 87 (1983). “A determination that significant effects on the human environment will in fact occur is not essential. ... If substantial questions are raised whether a project may have a significant effect upon the human environment, an EIS must be prepared.” *Foundation for North American Wild Sheep v. U.S. Dep’t of Agric.* 681 F.2d 1172, 1178 (9th Cir. 1982). When an agency relies on mitigation measures to reach a finding of no significant impact, mitigation must be assured to occur. If the effectiveness of mitigation is not assured, then the finding of no significant impact is invalid and the agency must prepare an EIS. *Id.*

The proposed lease sales overlie potential sources of drinking water. Under the Safe Drinking Water Act, an “underground source of drinking water” is defined as an aquifer with water that contains less than 10,000 mg/L (10,000 ppm) of total dissolved solids. 40 C.F.R. 146.3; 40 C.F.R. 144.3. Following the Safe Drinking Water Act’s definition, in its Onshore Oil and Gas Order No. 2, BLM similarly defines “usable water” as water containing less than 10,000 ppm of total dissolved solids. 53 Fed. Reg. 46,798, 46,801, 46,805 (Nov. 18, 1988). While water with salinity approaching 10,000 ppm total dissolved solids is considered “brackish,” such aquifers are increasingly being used for drinking water. In fact, EPA adopted the 10,000 ppm standard based on the 1974 legislative history of SDWA, which explained that Congress intended SDWA to “protect not only currently-used sources of drinking water, but also potential drinking water sources for the future.” H.R. Rep. No. 93-1185 (1974), 1974 U.S.C.C.A.N. 6454, 6484.

The attached report prepared by Dr. Dominic Digiulio, *Examination of Groundwater Resources in Areas of Montana Proposed for the March 2018 BLM Lease Sale* (Exhibit A) explains in detail that the lease parcels offered for sale likely overlie usable groundwater. The report shows that the vast majority of domestic and municipal wells within the lease area produce fresh groundwater (defined as water having less than 1,000 mg/L total dissolved solids) or brackish but usable water. *Id.* Thus, it is of paramount importance that BLM adequately evaluate whether the proposed lease sales will impact usable groundwater in the leasing area.

In the proposed lease sale, BLM has assumed without analysis that usable groundwater will be protected. The EAs made no attempt to map the quality of groundwater underlying the proposed lease sales or determine whether the groundwater was usable. Nor did they attempt to explain whether and how this research would be completed before lease development. Rather, the EA’s simply punted the analysis of any potential effects to the lease development stage, while simultaneously concluding that at that stage groundwater would be protected because “[a]ll wells would be cased and cemented to depths below accessible freshwater zones pursuant to [Montana Board of Oil and Gas] rules and federal regulations” and “[a]ll wells also would be constructed according to relevant [Montana Board of Oil and Gas] rules and [Montana Department of

Environmental Quality regulations to prevent cross-aquifer contamination.” Billings Field Office, Environmental Assessment DOI-BLM-MT- L002-2017-0002-EA at p. 50 (Dec. 13, 2017); *see also* Butte Field Office, Environmental Assessment DOI-BLM-MT- L002- 2017-0003-EA at pp. 39-40 (Dec. 13, 2017) (“All well casing and cementing operations that occur on Federal/Indian lands would be reviewed and approved by BLM and conducted in accordance with the applicable requirements specified in Onshore Oil and Gas Order No. 2 and the American Petroleum Institute (API) standards.”); Northcentral District, Malta, Glasgow, & Havre Field Offices, Environmental Assessment DOI-BLM-MT-L002-2017-0004-EA at p. 38 (Dec. 13, 2017) (“Offering twenty-four parcels for lease would have no direct impacts on water resources because no surface or subsurface disturbance would occur.”).

Contrary to BLM's unfounded assumption that groundwater will be protected, there is substantial evidence that usable groundwater will not be protected by the oil and gas drilling authorized by these lease sales. Despite the assertion that “[a]ll wells would be cased and cemented to depths below accessible freshwater zones pursuant to [Montana Board of Oil and Gas] rules and federal regulations,” Billings Field Office EA at p. 50, Montana regulations do not directly follow BLM's usable water definition, or specifically require wells to be cased and cemented below usable water. *See generally* Administrative Rules of Montana Board of Oil and Gas Conservation, Chapter 22, Rules 36.22.J01-36.22.1707. Moreover, BLM's Onshore Order No. 2's requirement to “protect and/or isolate all usable water zones” is inconsistently applied and often disregarded in practice. BLM itself has admitted that there is “continued confusion over which standard of “water needs to be isolated and/or protected” under Onshore Order No. 2. BLM, Regulatory Impact Analysis for the Final Rule to Rescind the 2015 Hydraulic Fracturing Rule at p. 44-45 (Dec. 2017) (Exhibit B).

Industry, moreover, has admitted that despite Onshore Order No. 2, it often does not protect usable water in practice. Western Energy Alliance and the Independent Petroleum Association of America (collectively, “WEA”) have told BLM that “existing practice for locating and protecting usable water” does not measure the numerical quality of water underlying drilling locations, and therefore does not take into account whether water containing less than 10,000 mg/L would be protected during drilling. Sept. 25, 2017 WEA comments at 59 (WEA comments), excerpts attached as Ex. 1 to Earthjustice Comments on March 13, 2018 Oil and Gas Lease Sale (Exhibit C). Instead, companies in Montana say they only install protective casing for the Pierre Shale formation, even if additional well casing would be needed to protect usable water located deeper than that formation. *Id.* Notably, there is nothing in Montana's oil and gas regulations that explicitly requires protective casing for the Pierre Shale formation or any other particular aquifer. *See generally* Administrative Rules of Montana Board of Oil and Gas Conservation, Chapter 22, Rules 36.22. 101-36.22.1707. WEA has explained that actually requiring companies to protect all underground sources of drinking water would result in substantial additional costs for “casing and cementing associated with isolating

formations that meet the numerical definition of usable water under the [Onshore Order No. 2 standard], but which are located at depths deeper than the zones that state agencies and BLM field offices have previously designated as requiring isolation.” WEA comments at 84. WEA predicted that complying with the 10,000 ppm usable water standard would cost industry nearly \$174 million per year in additional well casing expenses. *Id.* at 84-85. Industry's admissions raise a significant environmental concern that BLM must address before issuing new leases. Accepting WEA's statements as true, BLM and energy companies have been putting numerous underground sources of drinking water at risk.

These industry admissions that oil and gas well casing and cementing practices may not protect usable water are confirmed by a recent review of 9 production wells in Carbon and Stillwater counties, where the Southcentral Montana Billings, MT Field office proposes to offer additional oil and gas leases in this sale. *See* Dr. Dominic DiGiulio, *Examination of Selected Production Files in Southcentral Montana to Support Assessment of the March 2018 BLM Lease Sale* (Exhibit D). The report found that surface casing for the reviewed wells was generally shallow, extending only 288-617 feet below ground, even though the wells themselves extended thousands of feet below and through aquifers containing usable water. The report therefore concluded that “[b]ased on the shallow depth of surface casing and apparent lack of cement outside intermediate or production casing at depths in contact with usable water, it does not appear that usable water was protected during production at these wells as required by Onshore Rule # 2.” *Id.* at p. 2.

Recent reports have also linked oil and gas production to threatened or actual contamination of usable water. For example, a 2016 EPA report reviewed the effect of hydraulic fracturing—a common oil and gas extraction technique—on groundwater. EPA's report found that in some areas in Montana there was no vertical separation between the hydraulically fractured rock formation and the bottom of the underground drinking water resource. In such cases, hydraulic fracturing may introduce toxic fracturing fluid “into formations that may currently serve, or in the future could serve, as a drinking water source for public or private use.” EPA Report at ES-32 (Exhibit E). EPA noted that “[t]his is of concern in the short-term if people are currently using these formations as a drinking water supply. It is also of concern in the long-term, because drought or other conditions may necessitate the future use of these formations for drinking water.” *Id.*

Other recent studies have made similar findings. Researchers investigating the oil and gas-related contamination in Pavillion, Wyoming reported that shallow fracturing also occurs in Montana. Gayathri Vaidyanathan, *Fracking Can Contaminate Drinking Water* at 8, *Sci. Am.* (Apr. 4, 2016) (*Sci. Am.* Article), attached as Ex. 2B to Earthjustice Comments on March 13, 2018 Oil and Gas Lease Sale (Exhibit C). The researchers concluded that “it is unlikely that impact to [underground sources of drinking water] is limited to the Pavillion Field...” Dominic C. DiGiulio & Robert A. Jackson, *Impact to*

Underground Sources of Drinking Water and Domestic Wells from Production Well Stimulation and Completion Practices in the Pavillion, Wyoming Field, 50 Am. Chem. Society, Env'tl. Sci. & Tech. 4524, 4532 (Mar. 29, 2016), attached as Ex. 2A to Earthjustice Comments on March 13, 2018 Oil and Gas Lease Sale (Exhibit C). WEA's description of widespread non-compliance with Onshore Order No. 2, and the evidence that current oil and gas production is contaminating usable water, raise a significant environmental issue that must be addressed as a reasonably foreseeable effect of the lease sale. *Baltimore Gas & Elec. Co. v. NJWC*, 462 U.S. 87, 87 (1983). NEPA requires agencies to "analyze the mitigation measures in derail [and] explain how effective the measures would be. A mere listing of mitigation measures is insufficient to qualify as the reasoned discussion required by NEPA." *Northwest Indian Cemetery Protective Assn. v. Peterson*, 764 F.2d 581,697 (9th Cir. 1985). *rev'd on other grds*, 485 U.S. 439 (1988). In other words, BLM must ensure that companies are actually complying with Onshore Order No. 2's mandate to protect usable water before authorizing new leases. Because effectiveness of later mitigation to protect usable water is not assured in this case, BLM cannot sign a Finding of No Significant Impact and must prepare an EIS. *Foundation/or North American Wild Sheep v. US. Dep't of Agric.*, 681 F.2d 1172, 1178-81 (9th Cir. 1982). This analysis may not be deferred to the application to drill stage. "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment." *U.S. Bureau of Land Mgmt. v. Kern*, 284 F.3d 1062, 1072 (9th Cir. 2002). NEPA requires that an agency prepare an EIS before there is an "irreversible and irretrievable commitment of resources." *Conner v. Burford*, 848 F.2d 1441, 1446 (9th Cir. 1988). Courts have held BLM makes such a commitment where, as here, it issues oil and gas leases without reserving the right to prohibit development. *Id.* Thus, an EIS should have been prepared now, at the leasing stage, to evaluate the cumulative effect on groundwater from the proposed sale, and analyze whether additional mitigation or alternatives should be proposed to mitigate that risk.

Ignoring evidence of widespread noncompliance with BLM's standards for protecting underground sources of drinking water violates NEPA. To make an informed decision on whether to lease these lands BLM needs to know whether doing so will put underground sources of drinking water at risk, and what additional stipulations or other steps are needed to prevent such contamination. The information necessary to make such an assessment is readily available in BLM's own permitting files for existing oil and gas wells. from produced water records on existing wells, and from other sources such as US Geological Survey reports, as evidenced by the attached reports by Dr. DiGiulio (Exhibits A and D). Moreover, to the extent any information gaps exist, it is incumbent on BLM to obtain that additional information before making an irreversible commitment of resources by issuing the leases. Additional data on, for example, aquifer quality or well construction practices is "essential to a reasoned choice among alternatives" and can be collected at a cost that is not "exorbitant." See 40 C.F.R. § 1502.22. Because the Environmental Assessments supporting the lease sale fail to adequately analyze impacts

to usable groundwater, and because their associated Findings of No Significant Impact are invalid because there is substantial evidence that current industry practice will not adequately protect usable groundwater, we protest the March, 2018 lease sale.

BLM Response:

Any claims of widespread non-compliance with Onshore Order No. 2 are unsupported and analysis of such actions is outside the scope of the EAs. While the Protesters use a sample of wells in Exhibit D of their Protest and the observation that the annulus was not always sealed with cement through the entire depth of usable water to support their claim of non-compliance (Exhibit D, page 17), they omit important details and apply an incorrect interpretation of the regulations. For example, Exhibit D states, “based on the shallow depth of surface casing and apparent lack of cement outside intermediate or production casing at depths in contact with usable water, it does not appear that usable water was protected during the production at these wells, as required by Onshore Rule #2.” This argument is without merit, as it incorrectly interprets Onshore Order 2 as requiring that all zones with “usable water” be sealed with cement, along their entire length. In fact, the regulation states, “Determination of casing setting depth shall be based on all relevant factors, including: presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics.” This flexibility is vital to the protection of groundwater resources because numerous factors must be evaluated to determine the optimal strategy for protecting and/or isolating all usable water zones. Consequently, by accounting for these factors and adjusting the water resource protection measures accordingly, the potential for groundwater contamination is significantly reduced. In fact, the Protesters’ assertion that the annulus should always be sealed for the entire length of “usable water” not only relies on a misinterpretation of the corresponding regulations in Onshore Order 2, but it also incorrectly assumes that doing so would “always” be the most protective mitigation for groundwater resources.

As required by Onshore Oil and Gas Order 1. III. D. 3. (b), when submitting an Application for Permit to Drill (APD) to the BLM, the operator must include in the drilling plan “estimated depth and thickness of formations, members, or zones potentially containing usable water, oil, gas, or prospectively valuable deposits of other minerals that the operator expects to encounter, and the operator’s plans for protecting such resources.” It is up to the BLM Petroleum Engineer and/or the Geologist to analyze the information submitted to determine if the operator’s plan to protect usable water is adequate. Approval of operator submitted casing setting depths takes into consideration relevant factors such as, “presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.” (Onshore Order 2. III. B.) The surface casing is the only casing string with the requirement to cement to the surface. The BLM considers the water zone in these wells to be protected by the surface casing and shale in which it is set and the top of cement and shale below the water zone.

As stated in the Water Resources Sections of the leasing EAs, one of the key assumptions in the NEPA documents is that all future actions will comply with state, local, and federal regulations.

The use of any specific water source on a federally administered well requires review and analysis of the proposal through the NEPA process, which will be completed at the APD stage. The Gold Book, Surface Operating Standards and Guidelines for Oil and Gas Exploration and Development (BLM and USFS 2007), would be followed, and site-specific mitigation measures, BMPs, and reclamation standards would be implemented and monitored in order to minimize effects to water resources. All proposed actions must comply with local, state, and federal regulations, including Montana water laws. BFO EA at 42. BiFO EA at 50.

In addition, the leasing EAs describe the regulatory authorities for water resources in Montana.

Water in the lease area is managed by the state of Montana. The right to use surface and groundwater is administered by the Department of Natural Resources and Conservation (DNRC). The water quality standards of Montana support other Federal laws such as the Clean Water Act of 1977, the Water Resources Planning Act of 1962, the Pollution Prevention Act of 1990, and the Safe Drinking Water Act of 1977 and are administered by the Montana Department of Environmental Quality (MDEQ). BiFO EA at 41. BFO EA at 36. NCMD EA at 34.

Analysis of potential impacts to water resources from future fluid mineral development was included in the leasing EAs (Section 3.8). This analysis includes potential impacts to surface and groundwater quality and quantity. Furthermore, an overview of potential mitigation was provided. No additional analysis is required at this time. The three leasing EAs make this explanation.

The act of leasing parcels would not cause direct or cumulative effects to resources because no surface disturbance would occur. The only direct effects of leasing are the creation of valid existing rights and impacts related to revenue generated by the lease sale receipts. Future lease exploration and development activities proposed through individual APD submissions will be subject to future BLM decision-making and NEPA analysis BFO EA at 20. BiFO EA at 25. NCMD EA at 19.

The Water Resources sections of the three leasing EAs further explains that no impacts to water resources would occur at the leasing stage.

Offering nine parcels for lease would have no direct impacts on water resources, including: streams, wetlands, floodplains, or water bodies because no surface disturbance would occur. Any potential effects on water resources from the sale of lease parcels would occur at the time the leases are developed, at the APD stage. BFO EA at 38.

Offering 76 parcels for lease would have no direct impacts on water resources. Any potential effects on water from the sale of lease parcels would occur at the time the leases are developed at the APD stage. Fluid mineral development could affect water resources during exploration, drilling, production, and/or abandonment. BiFO EA at 46.

Offering twenty-four parcels for lease would have no direct impacts on water resources because no surface or subsurface disturbance would occur. Any potential effects to water resources would occur from subsequent exploration/development of the lease parcels, which would be subject to additional review and site specific conditions of approval (COAs). NCMD EA at 38.

Consequently, there are no anticipated adverse impacts to water resources as a result of leasing these parcels. Site specific analysis and corresponding mitigation would be provided at the APD stage. Upon receipt of an APD, the BLM would coordinate with the appropriate Surface Management Agency (SMA) and initiate a site-specific NEPA analysis with public review opportunities to more fully analyze and disclose potential effects of specifically identified activities. At that time, alternatives would be considered and any additional mitigation would be identified to address potential future impacts that arise in the site specific analysis. This would include a thorough inventory of any water resources that may be impacted and more in-depth, site-specific analysis of potential impacts to those resources, including water quantity and quality.

BLM is tiering to and incorporating by reference all impacts from the 2015 Billings Resource Management Plan (RMP) and associated Final EIS. BLM completes an EA if the analysis supports a FONSI, then there is no need for an EIS. In addition, surface disturbance is not part of the proposed action. At the time of this review, it is unknown whether or not a particular parcel will be sold and a lease issued and what potential impacts to those resources may occur. The EAs use reasonable Foreseeable Development Scenarios based on the RMPs to estimate potential effects.

A detailed site-specific analysis and mitigation of activities associated with any particular lease would occur when a lease holder submits an APD. This could include re-evaluating the area for protected species and habitat, additional COAs and involvement of external entities (e.g. USFWS), as necessary, based on the proposed action. The level of NEPA completed for future APDs (CX, DNA, EA, or EIS) would be based on site-specific considerations and the significance of effects.

The BLM analyzes all proposed federal actions in a NEPA document (whether they are for range, vegetation treatments, recreation, etc.) This analysis would include resources and resource uses proposed on or adjacent to the lease parcel lands. All actions are reviewed for compliance with the land use plan at the start of the NEPA process. Having areas available for oil and gas leasing does not mean that this activity is prioritized over other uses or that it is the only use on

BLM lands. The RMPs have areas closed and/or avoided for certain resource uses, prioritized for ACEC (Area of Critical Environmental Concern) designation, wilderness study areas, etc.

The 2009 BFO and 2015 BiFO and HiLine RMPs analyzed cumulative impacts at the field office level, using up-to-date Reasonably Foreseeable Development scenarios (RFDs). Due to the fact that there are no surface-disturbing activities authorized at the leasing stage, it is appropriate to reference/tier to the RMP level cumulative effects analysis, and to state that additional site-specific analysis will be completed if/when an APD is received. At this point, the analysis would not include information about potential impacts to resources, well locations, any roads or ancillary facilities, etc. that are not known at the leasing stage.

Within the leasing EAs, the BFO, BiFO and NCMD identify parcels that contain water resources (Appendix As) and tier to/incorporate by reference all impacts from the respective RMPs, which include analysis of direct, indirect and cumulative impacts from oil and gas development on water resources.

Furthermore, the application of the following No Surface Occupancy (NSO) Stipulations, in addition to existing state, local, and federal regulations, would mitigate any potential adverse impacts to water resources.

NSO 11-2- NO SURFACE OCCUPANCY- RIPARIAN, FLOOD PLAINS, RIVERS, STREAMS AND WATER BODIES (BFO)

No surface occupancy or use is allowed within riparian areas, 100-year flood plains of major rivers, and water bodies and streams, and to maintain riparian/wetlands function and water quality.

For the purpose of: To protect the unique biological and hydrological features associated with riparian areas, 100-year flood plains of major rivers, and water bodies and streams; and to maintain riparian/wetlands function and water quality.

NSO 11-20- BLUE RIBBON TROUT STREAM (BFO)

No surface occupancy or use is allowed within one-half mile from the centerline of Class 1 fishery streams (Blue Ribbon Trout streams).

For the purpose of: To ensure healthy aquatic habitats are maintained along Class 1 fisheries.

NSO 11-48- YELLOWSTONE CUTTHROAT TROUT (BFO)

No surface occupancy or use is allowed within one-half mile from the centerline of streams containing known populations of 90-100% pure Yellowstone Cutthroat Trout.

For the purpose of: To ensure healthy aquatic habitat exists in drainages important to the viability of Yellowstone Cutthroat Trout.

NSO 11-70- STREAMS, WATERBODIES, RIPARIAN, WETLAND AND FLOODPLAINS (NCMD)

Surface occupancy and use is prohibited within perennial or intermittent streams, lakes, ponds, reservoirs, 100-year floodplains, wetlands, and riparian areas.

NSO 11-71- SOURCE WATER PROTECTION AREAS (BiFO, NCMD)

Surface occupancy and use is prohibited within State-designated Source Water Protection Areas.

B. BLM has Failed to Consider the Cumulative Impacts of the Lease Sales.

Under NEPA, BLM is required to evaluate the cumulative impacts of the lease sale “resulting from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions.” 40 C.F.R. § 1508.27(h)(7). “The cumulative impact analysis must be more than perfunctory; it must provide a “useful analysis of the cumulative impacts of past, present, and future projects.” *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1075 (9th Cir. 2002). Proper consideration of cumulative impacts requires “some quantified or detailed information” and general statements about possible effects “do not constitute a hard look absent a justification regarding why more definitive information could not be provided.” *Klamath-Siskiyou Wildlands Center v. Bureau of Land Management*, 387 F.3d 989, 993-94 (9th Cir. 2004).

Here, BLM has not prepared a cumulative impacts analysis evaluating the effects of the lease sale. Rather than prepare a single analysis analyzing the environmental impacts from the sale proposed here, BLM has improperly piecemealed analysis into three separate Environmental Assessments, none of which performed a cumulative impact analysis that takes into account the combined impact of the lease sale. As detailed above, the lease sale may have significant impacts on groundwater quality. BLM should have conducted a cumulative impact analysis that reviewed the combined potential impact on usable water from all of the parcels offered for sale. See, e.g., *Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1075 (9th Cir. 2002) (holding that an EA for a timber sale must analyze the reasonably foreseeable future timber sales within the area). This analysis should have also included an analysis of the extent of past oil and gas leasing in the area, how this past leasing may have contributed to significant environmental impacts

including groundwater contamination, and whether additional leasing may have an "additive and significant relationship to those effects." Council on Environmental Quality, Guidance on the Consideration of Past Actions in Cumulative Effects Analysis at p. 1 (June 24, 2005); *Lands Council v. Powell*, 395 F.3d 1019, 1028 (9th Cir. 2005). Because BLM has failed to conduct a cumulative impact analysis on groundwater, we protest this sale.

BLM Response:

This EAs are tiered to the information and analysis and conforms to the decisions contained in the 2009 BFO and 2015 BiFO and HiLine Records of Decision (ROD) and Approved Resource Management Plans (ARMP). The RODs and ARMPs are in compliance with all Federal laws, regulations, and policy. The direct, indirect, and cumulative effects of oil and gas leasing across the Field Office were evaluated in the FEISs for the ARMPs.

All three EAs tier to the appropriate RMP (this is dependent on the geographic area in which the parcels are located), and these RMPs contain cumulative impacts at the appropriate scales for the full RFDs done in each FO (i.e., the RMPs address cumulative impacts resulting from the full development predicted within the RMP). The decisions on what areas to not lease, lease with standard, moderate, or major stipulations is done at the RMP level as well in order to look at the larger picture of impacts (including cumulative impacts). There are no surface-disturbing activities authorized at the leasing stage; any potential site-specific cumulative impacts not addressed in the RMP would be completed at the APD stage (when there is an actual proposal to drill).

C. BLM has Failed to Consider a Reasonable Range of Alternatives.

NEPA mandates that the BLM provide a detailed statement regarding the alternatives to a proposed action. See 42 U.S.C. § 4332(2)(C)(iii); 42 U.S.C. § 4332 (2)(E). NEPA's requirement that an agency consider alternatives to its proposed action is the "heart" of environmental review. 40 C.F.R. § 1502.14; 40 C.F.R. § 1508.9(b). Consideration of reasonable alternatives is necessary to ensure that BLM has taken into account all possible approaches to, and potential environmental impacts of, a particular project. *Calvert Cliffs' Coordinating Comm. Inc. v. U. S. Atomic Energy Comm'n*, 449 F.2d 1109, 1119 (D.C. Cir. 1971). "NEPA's alternatives requirement, therefore, ensures that the "most intelligent, optimally beneficial decision will ultimately be made." *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 978 (9th Cir. 2006). BLM must "rigorously explore and objectively evaluate all reasonable alternatives." 40 C.F.R. § 1502.14." The existence of a viable but unexamined alternative renders an environmental impact statement inadequate." *Citizens for a Better Henderson v. Hodel*, 768 F.2d 1051, 1057 (9th Cir. 1985).

In each of the EAs, BLM evaluated only the Proposed Action (leasing all parcels) and a No Action Alternative. This was inadequate. BLM should have evaluated alternatives that, among other things, would have protected usable groundwater, including an alternative whereby parcels would not be leased in areas overlying usable groundwater, and an alternative that includes other measures to ensure that all usable groundwater zones are protected. This might involve pre-leasing groundwater testing and adding a lease stipulation or lease notice requiring specified casing and cementing depths. Alternatively, BLM should consider requiring a lease stipulation or lease notice requiring the lessee to perform groundwater testing prior to drilling to identify all usable water, and consultation with US Geological Survey and other agencies to identify those waters with up to 10,000 ppm. *See, e.g., Muckleshoot Indian Tribe v. U.S. Forest Serv.* 177 F.3d 800, 813 (9th Cir. 1999) (“Forest Service failed to consider an adequate range of Serv., 177 F.3d 800, 813 (9th Cir. 1999) (“Forest Service failed to consider an adequate range of alternatives” when the “EIS considered only a no action alternative along with two virtually identical alternatives”); *Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 813 (9th Cir. 2005) (holding that the Forest Service had unlawfully failed to consider an alternative to a timber program that would have provided greater protection for old-growth habitat); *Colorado Envtl. Coal. v. Salazar*, 875 F. Supp. 2d 1233, 1248 (D. Colo. 2012) (holding that BLM unlawfully failed to consider an alternative to oil and gas leasing that would have involved minimal surface disturbance); *Wilderness Soc., Ctr. For Native Ecosystems v. Wisely*, 524 F. Supp. 2d 1285, 1312 (D. Colo. 2007) (holding that BLM should have considered a “potentially appealing middle-ground compromise between the absolutism of the outright leasing and no action alternatives” that would have reduced environmental impacts). Because BLM has failed to adequately consider a reasonable range of alternatives that would protect usable groundwater, we protest this sale.

BLM Response:

BLM analyzed all parcels in the EAs to determine what stipulations from the RMPs needed to be applied and if those stipulations are still adequate (i.e., still provide the protections they were designed to provide). The 2009 BFO RMP and 2015 HiLine and BiFO RMPs are recent RMPs and robust analyses were done on the stipulations and management actions for all resources, using up-to-date Reasonably Foreseeable Development Scenarios. Since these parcels have stringent resource protections for all relevant resources (NSO, CSU), there was no need to analyze an alternative excluding such parcels (i.e., no environmental impact issues remaining after the application of NSO and CSU stipulations that would indicate a need to look at an alternative with fewer parcels).

IV. CONCLUSION

The Protesters requested that the BLM withdraw 109 parcels from the MSO, March 13, 2018, Competitive Oil and Gas Lease Sale. The Protester contends that the BLM failed to consider the

impacts of the lease sale on groundwater, failed to consider the cumulative impacts of lease sales, and failed to consider a reasonable range of alternatives.

The BLM Montana State Director has decided to defer three (3) BFO parcels and 23 BiFO parcels from the MSO, March 13, 2018, Competitive Oil and Gas Lease Sale. The protest of these 26 parcels is dismissed as moot. The protest of the other 83 parcels is dismissed for the reasons stated above.

The BLM dismisses this protest for the reasons stated above.

The BLM, in accordance with existing regulations and policies, will defer leasing actions on 26 lease parcels in the BFO and BiFO planning areas. See Enclosure 3 for a description of the deferred parcels. The BLM will offer for lease the other 83 protested parcels as described in the MSO, March 13, 2018, Notice of Competitive Oil and Gas Lease Sale.

Administrative Review and Appeal

This Decision may be appealed to the Interior Board of Land Appeals (IBLA), Office of the Secretary, in accordance with the regulations contained in 43 C.F.R. § 4 and Form 1842-1 (Enclosure 2). If an appeal is taken, the Notice of Appeal must be filed in the Montana State Office at the above address within 30 days from receipt of this Decision. The appellant has the burden of showing that the decision appealed from is in error.

If you wish to file a petition for a stay of the effectiveness of this Decision during the time that your appeal is being reviewed by the Board, the petition for a stay must accompany your notice of appeal. A petition for a stay must show sufficient justification based on the standards listed below. Copies of the notice of appeal and petition for stay must be submitted to the IBLA and the appropriate Office of the Solicitor (see 43 C.F.R. § 4.413) at the same time the original documents are filed with this office. If you request a stay, you have the burden of proof to demonstrate that a stay should be granted.

Standards for Obtaining a Stay

Except as otherwise provided by law or other pertinent regulations, a petition for a stay of a decision pending appeal shall be evaluated based on the following standards:

1. The relative harm to the parties if the stay is granted or denied;
2. The likelihood of the appellant's success on the merits;

3. The likelihood of immediate and irreparable harm if the stay is not granted; and
4. Whether the public interest favors granting the stay.

/s/ Donato J. Judice

Donato J. Judice
Deputy State Director
Energy, Minerals, & Realty

3 Enclosures

- 1- Earthjustice Protest Letter Dated January 11, 2018 (24 pp)
- 2- Form 1842-1 (2 pp)
- 3- Description of 26 Deferred Parcels (5 pp)

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